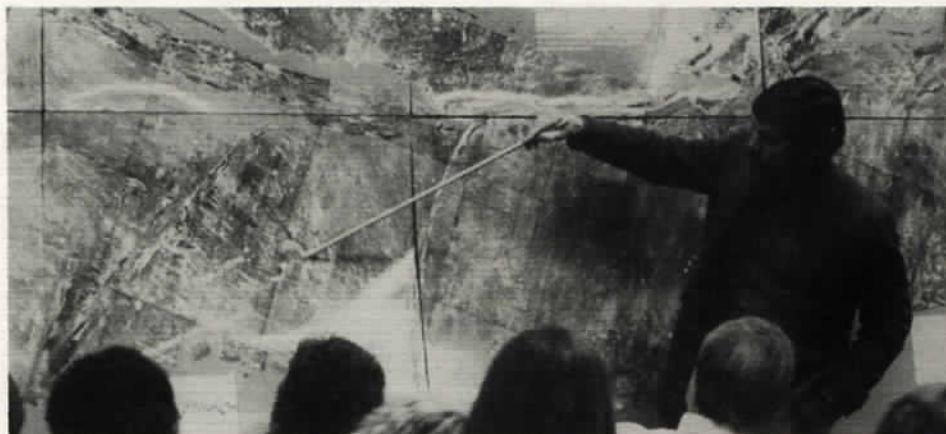


The Center Scene

Winter 1986/87



Dr. James Gardner describes features on a large mosaic of GLORIA data of the West Coast U.S. Exclusive Economic Zone to a part of his EDC audience.

Mendenhall Lecturer Speaks at EDC

Dr. James Gardner, the 1986 U.S. Geological Survey (USGS) Mendenhall Research Seminar speaker gave a very interesting presentation on "An Amazing New Use of the Sea Floor: the GLORIA Project" at EDC on December 19, 1986.

The USGS and the British Institute of Oceanographic Sciences (IOS) have been involved in a cooperative program over the past 5 years in collecting, processing, and analyzing sonar images of the ocean bottom. The side-scan sonar images have been collected by the GLORIA (Geological Long Range Inclined Asdic) system, which was designed, built, and is operated by IOS.

Dr. Gardner worked with the director of IOS in the United Kingdom to integrate the USGS program with the IOS program and served as program coordinator for the West Coast GLORIA Program, the first of the USGS programs to systematically survey the U.S. Exclusive Economic Zone (EEZ) using the GLORIA system. The initial product is an Atlas of the processed data of the entire West Coast EEZ.

Dr. Gardner's formal lecture was enhanced with slides and a large

mosaic of GLORIA data of the West Coast EEZ. In the afternoon, he held technical discussions with EDC scientists and engineers.

The Mendenhall Research Seminars are sponsored by the U.S. Geological Survey and named in honor of Dr. Walter Curran Mendenhall, who was USGS director from 1931 to 1943. Dr. Mendenhall set the tone for Survey studies with this statement, "There can be no applied science unless there is science to apply." Under his leadership, and that of 11 other directors, the USGS has become the nation's largest Earth-science research organization. The Mendenhall seminars are aimed at recognizing excellence in research by USGS personnel, fostering communications between Earth-science researchers within the agency, and providing a public forum for significant new research. One USGS scientist is selected each year by the director of the U.S. Geological Survey to present the Mendenhall series.

The 1987 Mendenhall Seminar Lecturer will be Dr. Samuel N. Luoma, Chief, Branch of Regional Research, Western Region, Water Resources Division.

Commemorating the Bicentennial of the U.S. Constitution

Two centuries ago, in May 1787, representatives from the American states convened in Philadelphia to revise a document which, they hoped, would bring unity and order to their newly created nation. Four months later, on September 17, they completed work on a new national Constitution—a document that laid the foundations for a truly democratic society, establishing a federal government of the people, by the people and for the people.

Nearly 200 years later, the United States is preparing to repay an old debt—a debt of gratitude to those founding fathers. The U.S. Constitution is the oldest written instrument of national government in the world. It is the cornerstone of American democracy, the document which has come to symbolize our national ideals of freedom, justice, equality and hope.

The year 1987 will be dedicated to the commemoration of the Bicentennial of our Constitution. It is an event of historic magnitude, one that will find commemorative activities scheduled throughout the year, culminating on September 17, 1987, when Americans everywhere will join together to honor both the Constitution and the free society which it helped create. The Revolution gave us freedom; the Constitution gave us the means to keep it.

The celebrations will continue into 1988, in remembrance of the tortuous ratification process of the Constitution by the states. Then, in 1989, Americans will observe the 200th anniversary of the election of our first President and U.S. Congress, and the appointment of the first Supreme Court.

(Reprinted from "A Guide to Celebrating the Bicentennial of the U.S. Constitution")



UP FRONT PECORA XI

I am pleased that Pecora XI will once again be held in Sioux Falls this Spring. Pecora X was held in

Colorado Springs in 1985 so we have had a couple of years to regroup and put forth new enthusiasm and hard work toward the 1987 Symposium.

As a part of the U.S. Geological Survey, EROS has a special challenge to ensure that Pecora XI works smoothly and successfully. The U.S. satellite land remote sensing program is in a state of disarray and confusion at this time and this symposium and resulting discussions could not come at a better time.

I am particularly excited about the theme, *Satellite Land Remote Sensing: Current programs and a Look to the Future*, which will focus on issues by policy makers in high government and commercial offices.

Representatives from leading research, development and operational agencies and companies in the United States, Canada, Europe, Japan, India, the USSR, and the People's Republic of China have been invited to discuss future remote sensing systems plans and programs.

Pecora XI will also feature an open, provocative discussion of user perspectives on current programs by a panel of experts from all sectors of the user community. During this session, the audience will be encouraged to participate and express views.

As plans progress, we will keep you informed about Pecora XI, which will be held May 5 through 7. We in the USGS look forward to working with NASA, NOAA, EOSAT, and ASPRS on a Pecora symposium with an innovative approach to contemporary remote sensing issues and policies.

Allen H. Watkins

A LOOK AT THE TECHNIQUE DEVELOPMENT AND APPLICATIONS BRANCH

(Third in a Series)

Edited by K.C. Wehde

Technique Development Section

The multidisciplinary staff of the Technique Development Section (TDS) focus their efforts on research and development in remote sensing, image processing, and spatial data analysis. Their goals are to conduct research and development on new and improved data processing and analysis techniques, to investigate and evaluate new techniques and products for transfer to the user community, and to transfer capabilities to the Data Production and Distribution Branch. To meet these goals, TDS personnel specialize in project areas that include image mapping research and development, geographic information systems research and development, cooperative applications projects, and training.

Image Mapping Research and Development

Image mapping research is carried out to assist the Data Production and Distribution Branch in improving production methods for generating image maps and to develop new image processing techniques and data products for availability to the public.

GIS Research and Development

Geographic information system (GIS) research and development includes many activities from this multifaceted arena. These activities include spatial data research and development in data base management, spatial analysis, map design, automated label placement, and attribute handling.

Cooperative Projects

Cooperative applications projects provide an opportunity for TDS staff members to expand research and development activities to meet immediate project needs, to test new technologies, and to disseminate these technologies to Department of Interior (DOI) agencies.

Information Dissemination

In addition to publications in professional journals and participation in symposia and conferences, new technologies are transferred to DOI agencies and other users through training courses and work-

shops held at the Data Center and at agency offices.

In Summary

The overall goals of TDS are to assist the Data Center with image processing and GIS technology to meet current NMD/EDC project needs and to develop new capabilities for processing and analyzing spatial data in anticipation of both near-term and long-term requirements. In pursuit of these goals, TDS staff make contributions to Center-wide task teams and committees. Staff also provide day-to-day problem solving assistance for EDC staff who use ARC/INFO, vector data conversions, the Land Analysis System (LAS), and many other analysis tools. The TDS staff is a dedicated group of multi-talented individuals with a professional curiosity for problem solving and technical development — a very desirable element for the making of a successful working unit.

(Alaska Field Office next in this series)

VESCO Received Energy Award

Viking Engineering Service Company (VESCO), the EROS Data Center (EDC) engineering contract operator, has received another national energy conservation award. VESCO was one of four South Dakota companies to be honored by the National Awards Program for Energy Innovation in 1986.

VESCO was cited for implementing a system whereby reducing the water temperature in the cooling tanks from 75° to 45° to operate as a chiller, instead of using a condensor-cooler, a no-cost cooling system was effected.

Robin Hermanson, facility engineer, is Vice President of VESCO.

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COOPERATIVE FEDERAL LAND REMOTE SENSING RESEARCH PROGRAM

by Kevin P. Gallo

The U.S. Geological Survey (USGS) and the National Oceanic and Atmospheric Administration (NOAA) have signed a Memorandum of Agreement to establish a Cooperative Federal Land Remote Sensing Research Program located at the EROS Data Center. The objectives of this research program are to design, develop, and conduct land remote sensing research, applications development, and user education. This program is expected to promote greater operational and research use of remotely sensed data and related technology within the Federal and State government, academia, and the private sector. The program is anticipated to advance mankind's knowledge and understanding of the Earth and its processes.

A cooperative research project to evaluate satellite assessment by USGS and NOAA scientists at the Data Center of climatic variables that are associated with land surfaces is being conducted under the auspices of the Cooperative Research Program. Satellite data include daily and weekly composited measurements of visible, reflected, and thermal infrared energy for the Great Plains region of the United States. Geographic information for the area includes political, topographic, climatic, and land resource data bases that will be used to stratify the satellite and ground-based observations. This study will address the utility of regional remotely sensed data to extract information for monitoring land surface and climatic variables.

TGS Awarded EROS Contract

The United States Geological Survey has announced that a contract has been awarded to TGS Technology, Inc., to provide technical and professional staffing operations at the EROS Data Center. The contract is for four years and nine months, after which it will be bid again.

EROS employs over 50 Federal Civil Service personnel, about 250 TGS staff, and about 50 persons who work for engineering, custodial, and security contractors.



Dinner music by the Sadoti String Trio of the Sioux Falls Symphony Orchestra added a "touch of class" to the EDCEA Christmas Party.

EDCEA Activities

Accolades go to the EDC Employees Association (EDCEA) for their dedication and continued efforts toward making the annual Friendship Tree a part of EDC's Christmas tradition. Each year EDCEA asks employees to donate \$10.00 for each red bow that decorates the tree, and designates worthy charities to receive the money from the bows. The goal each year is 100 bows on the tree with \$1,000 to be donated to the recipients. This year, employees gave \$1,022 and many gifts of clothing, toys, and staple foodstuffs that were distributed to the Threshold Agency, the Food Service Center and Food Bank, and the Salvation Army.

Also, EDCEA again arranged a special Christmas party in the beautifully decorated Starlight Room atop the Holiday Inn-City Centre. Cocktails and a sumptuous buffet with dinner music by the Sadoti String Trio from the Sioux Falls Symphony were followed by dancing to the music of Easy Street. A number of very nice gifts were distributed at a prize drawing. Our thanks to the many generous donors who helped make the Christmas party a delightful holiday event.

Remember to buy your EDCEA coffee mugs. The attractive 12-ounce gray ceramic mugs have "EROS Data Center" printed on two sides in blue. Jackets, T-shirts, and sweatshirts with EROS logos are also still available. See your EDCEA representatives.

EROS PEOPLE

Awards

Marla Boese, User Services, Data Production and Distribution Branch (DPDB), received a special recognition award for consistent excellence in the performance of duties far beyond the normal secretarial responsibilities of her position.

John Dwyer, Technique Development and Applications Branch, won special achievement for his outstanding efforts in computer services coordination and geoscience research, and specifically for his contributions to the success of the USGS Conterminous United States and Alaskan Mineral Resource Assessment Programs.

Julie Bowman and *Barbara Larson*, Receptionists, DPDB, were recognized for continued excellence in their job performance while assuming many additional duties over the normal requirements of their Center Service Technician positions.

Ron Risty was presented a special achievement award for his coordination of activities during the Landsat commercialization transition, the Chernobyl incident, and his contributions in DORRAN and the transition to EDC for Digital Line Graph, Digital Elevation Model, and Land Use-Land Cover data sets.

The Other Life —

Woody Yaroach: Actor, Director, Set Builder



Merlyn "Woody" Yaroach

by Phyllis Wiekping

Theater—the very word evokes the glare of footlights, the smell of grease paint, the thunderous roar of applause, and the shouts of "Bravo" ringing through the air.

While a fairly large number of EROS people are active in the performing arts, the one individual who is the epitome of Theater, with a capitol "T" is Merlyn "Woody" Yaroach, our recently retired Administrative Officer.

Off to Minneapolis.

Where did it all begin? "Minneapolis," he said, "When I got out of the service, I went there to work and soon after, became a member of St. Clement's Church."

He joined the choir and eyed a lovely young singer named Deloris, but didn't actually meet her until the Church announced that its drama department was looking for actors and actresses. Deloris and he tried out and both got parts in "Mrs. Dargen's Choice." He played the hero, a dashing young man ("which I was, at the time"). Deloris played an older woman—not his leading lady in the play, but she soon became the leading lady in his life.

They were in other plays in that church, but the best roles they played were for real—in their wedding at St. Clement's in 1948.

In 1956, Woody transferred to Washington, D.C., and they moved to Arlington, Virginia.

"Our theater involvement then turned to attending shows in Washington and on Broadway. We weren't active participants during our years in the East."

Transfers to South Dakota.

After transferring to South Dakota

in 1973, Woody and Dee attended the Sioux Empire Fair and came upon a Community Playhouse booth.

"The next thing we knew," Woody said, "they had talked us into trying out for a play, an old-fashioned melodrama, 'Love Rides the Rails,' and we both got parts."

Since that time, Woody has been in nine more Playhouse productions.

From 1979 to 1981 he was president of the Playhouse Board and during that time spearheaded a big fund drive that resulted in an extensive renovation of the Theater. He was president of the South Dakota Theater Association from 1982 to 1984. His current responsibilities include coordinating a 7-state theater competition that will be held next April.

Expands Theater Activities.

Not content with resting on their laurels from Community Playhouse activities, Woody and Dee motivated and inspired the Dell Rapids, Corson, and Worthing communities to form community theaters. They gave advice and council to the Corson Mighty Art Players and the Old Towne Players at Worthing.

Nearest and dearest to their hearts are the Old Operahouse Players (OOPS) which they were instrumental in organizing 10 years ago in Dell Rapids, their home for the past 11 years.

Rewards and Challenges.

In a serious mood, Woody reflected on the satisfaction of trying to portray somebody else and make it believable to an audience.

"It's a very rewarding, self-image building experience," he said. "Even more exciting is watching others, especially young people, develop poise and self control, and knowing that you've been a part of helping them grow."

Woody has helped build the sets for every OOPS production. He has acted in many of the plays and directed the others.

Theater lovers from both communities are very grateful that although Woody is retiring from his official government duties at EROS, he is definitely not retiring from theater involvement. In fact, we can expect to see his stardom soar to even greater heights.

EROS/FFA Farm Project

by Kent Hegge

The leaves have long since lost their luscious green luster of summer time. The golden browns of fall have come and gone. The chill in the air tells us that winter has arrived.

These three brief sentences can be interpreted in many different ways by the many people associated with the EROS Data Center. But for two groups of local students it means that the harvest of an entire years planning, working, learning, and even gambling—has been reaped.

These groups are the Future Farmers of America (FFA) groups of Baltic and Garretson who farm the approximately 80 acres of farm land on the EDC complex.

The agreement is simple. The Data Center rents the land to the groups and the students agree to raise crops according to approved soil conservation practices with weed control listed as mandatory.

Kent Hegge and Robin Hermanson, who are designated EDC interfaces for the Baltic and Garretson FFA groups respectively, claim the working relationship is working out very well.

Local schools are using an added educational tool to teach students hands-on aspects of Agri-Business that can not be learned from a text book.

Future generations of farmers and businessmen are able to see the benefit and necessity of a good business-management program in building their futures.

But, even if the educational experience were not figured, the hard, cold, dollar facts do show benefits.

The last two years have seen an influx of almost \$8,000.00 annually to the economies of each of the local communities. This includes the buying of fuel at the local station, hiring of custom machinery from local farmers and implement dealers, selling of grain, and dealing with local elevator companies.

The local groups also use the money from crop sales to aid future education with special purchases for their programs and to fund Community Service projects.

The Director of the U.S. Geological Survey has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this agency.